

Title (en)

IMPROVED CURE PARAMETERS IN RUBBER VULCANIZATION

Title (de)

BESSERE HÄRTUNGSPARAMETER FÜR DIE VULKANISIERUNG VON KAUSCHUK

Title (fr)

PARAMETRES DE CUISSON PERMETTANT UNE VULCANISATION PERFECTIONNEE DU CAOUTCHOUC

Publication

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Application

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Abstract (en)

[origin: WO9534601A1] A vulcanized rubber composition which comprises the vulcanization reaction product of 100 parts by weight of at least one natural or synthetic rubber; 0.1 to 25 parts by weight of sulfur and/or a sufficient amount of a sulfur donor to provide the equivalent of 0.1 to 25 parts by weight of sulfur; 10-100 parts by weight of at least one silica filler; 0.1 to 5 parts by weight of at least one anti-reversion coagent comprising at least two groups selected from citraconimide and/or itaconimide groups; and a sufficient amount of at least one cure-improving resin to significantly increase the delta torque of the rubber composition during the vulcanization process as compared to the delta torque of a similar rubber composition in the absence of the cure-improving resin, is disclosed. Also disclosed is a process for the vulcanization of this rubber composition, and articles of manufacture comprising the vulcanized rubber composition. The invention is useful for the partial or complete replacement of silane coupling agents in silica-filled rubber compositions.

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